

Page 1 of 1 Attorney Docket No.: 23239-538

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					Filing Date	Septem	ber 16, 2	6, 2003		
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Page 1 of 1
Attorney Docket No.: 23239-538

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Modified Form 1449/PTO 10/664,610 **Application Number** September 16, 2003 Filing Date First Named Inventor INFORMATION DISCLOSURE Wilson **Group Art Unit** 1648 STATEMENT BY APPLICANT -Bo-Peng-Louise Humphrey **Examiner Name** 23239-538 (use as many sheets as necessary) **Attorney Docket Number** U.S. PATENT DOCUMENTS **Filing Date** Name of Patentee(s) or Applicant(s) Sub **U.S. Patent** Class Exam Cite **Issue Date** If Appropriate Initials No. Document No. Class U.S. PUBLISHED APPLICATION DOCUMENTS Name of Patentee(s) or Applicant(s) U.S. Published Sub **Published** Class Filing Date Exam Cite **Application No.** Initials No. Date Class **Appropriate** 6 LH 435 Rajendran et al. *A2 2002/0127581 A1 09/12/02 FOREIGN PATENT DOCUMENTS Date of Translation **Foreign Patent Document** Exam Cite Name of Patentee(s) or Applicant(s) **Publication** Yes No initials No. Office Number LH **B1** WO 96/40717 NEXSTAR PHARMACEUTICALS, INC. 12/19/96 02/08/01 **B2** 01/09158 a1 SOMALOGIC, INC. WO LH NATIONAL INSTITUTE OF ADVANCED LH 1 219 708 A1 07/03/02 **B**3 EΡ INDUSTRIAL SCIENCE AND **TECHNOLOGY** OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS Exam Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc. initials No. Araki et al. Nucl. Acids Res., 26(14).3379-3384 (1998) C2 Sayer et al. Biochem. Biophys. Res. Commun., 293:924-931 (2002) **C3** Supplementary Partial European Search Report for EP 03 75 2557, mailed February 15, 2006.

* By the waiver of 37 CFR 1.98(a)(2)(i) a copy of the U.S. Published Application A2 is not submitted.

Examiner Signature	/Louise Humphrey/	(09/12/2006)	Date Considered	·
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Modified Form 1449/PTO	Application Number	10/664,610
	Filing Date	September 16, 2003
INFORMATION DISCLOSURE	First Named Inventor	Wilson et al.
STATEMENT BY APPLICANT	Group Art Unit	1648
	Examiner Name	Humphrey, Louise Wang Zhiying
(use as many sheets as necessary)	Attorney Docket Number	23239-538

				U.S. PATENT DOCUMENTS			·
Exam Initials	Cite No.	U.S. Patent Document No.	Issue Date	Name of Patentee(s) or Applicant(s)	Class	Sub Class	Filing Date If Appropriate
LH	*A3	4,683,195	07/28/87	Mullis			
	*A4	4,801,530	01/31/89	Nogueira et al.			
	*A5	4,894,325	01/16/90	Engelhardt et al.			
	*A6	4,935,363	06/19/90	Brown et al.			
	*A7	4,959,309	09/25/90	Dattagupta et al.			
	*A8	5,070,010	12/03/91	Hsu			
	*A9	5,118,801	06/2/92	Lizardi et al.			
	*A10	5,270,163	12/14/93	Gold et al.			
	*A11	5,338,671	8/16/94	Scalice et al.			
	*A12	5,459,015	10/17/95	Janjic et al.		\prod	
	*A13	5,496,938	03/05/96	Gold et al.		M	
	*A14	5,503,978	04/12/96	Schneider et al.			
	*A15	5,567,588	10/22/96	Gold et al.			
	*A16	5,580,737	12/03/96	Polisky et al.		Y	
	*A17	5,635,615	06/03/97	Allen et al.			
	*A18	5,637,459	06/10/97	Burke et al.			
	*A19	5,648,214	07/15/97	Nieuwlandt et al.			
	*A20	5,654,151	08/05/97	Allen et al.			
	'A21	5,660,985	08/26/97	Pieken et al.			
	*A22	5,683,867	11/04/97	Biesecker et al.			
	*A23	5,691,145	11/25/97	Pitner et al.			
	*A24	5,705,337	01/06/98	Gold et al.			
	*A25	5,707,796	01/13/98	Gold et al.			
	*A26	5,723,323	03/03/98	Kauffman et al.			
	*A27	5,756,703	05/26/98	Stein et al.		1	
	*A28	5,763,173	06/09/98	Gold et al.			
W	*A29	5,763,177	07/09/98	Gold et al.			

Express Mail No.: EV461508866US Date of Deposit: May 22, 2006

Exam Initials	Cite No.	U.S. Patent Document No.	Issue Date	U.S. PATENT DOCUMENTS Name of Patentee(s) or Applicant(s		Sub Class	Filing Date If Appropriate
LH	*A30	5,789,157	08/04/98	Jensen et al.	\ .	/	
	*A31	5,859,228	01/12/99	Janjic et al.			
	*A32	5,861,254	01/19/99	Schneider et al.		1	<u> </u>
	*A33	5,958,691	09/28/99	Pieken et al.			
	*A34	5,989,823	11/23/99	Jayasena		X	
	*A35	6,011,020	01/04/00	Gold et al.			
	*A36	6,013,443	01/11/00	Heilig et al.			
	*A37	6,020,130	02/01/00	Gold et al.			
V	*A38	6,051,698	04/18/00	Janjic et al.			
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				BLISHED APPLICATION DOCUME		7	
Exam Initials	Cite No.	U.S. Published Application No.		d Name of Patentee(s) or Applicat	nt(s) Class	Sub Class	Filing Date If Appropriate

Express Mail No.: EV461508866US Date of Deposit: May 22, 2006

Exam Initials	Cite No.	Foreign Office	Patent Document Number	Name of Patentee(s) or Applicant(s)	Date of Publication	Translation Yes No
LH	B4	EP	0592035	Scalice, E. et al.	04/13/94	
	B5	UK	2 183 661 A	Ballivet, M. et al.	06/10/87	
	B6	PCT	WO89/06694	Trustees of University of Pennsylvania	07/27/89	
	B7	PCT	WO91/14436	ISIS Pharmaceuticals, Inc.	10/03/91	
	B8	PCT	WO 91/19813	The University of Colorado Foundation, Inc.	12/26/91	
	В9	PCT	WO92/05285	Fred Hutchinson Cancer Research Center	04/02/92	
	B10	PCT	WO92/07065	Max-Planck Gesellschaft	04/30/92	
	Bil	PCT	WO92/14842	Gilead Science, Inc.	09/03/92	
	B12	PCT	WO92/14843	Gilead Science, Inc.	09/03/92	
	B13	PCT	WO98/18480	Nexstar Pharmaceuticals, Inc.	05/07/98	
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Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
	CS	Andrake (1988) Proc. Natl. Acad. Sci. USA 85:7942-7946
	C6	Bernett et al., (2001) J. Virol 75:5526-5540
•	C 7	Belshe et al., (1994) JAMA. 272: 431
	C8	Burton (1997) Proc Natl Acad Sci U S A. 94: 10018-10023
	C9	Carey et al., (1983) Biochem. 22(11):2601-2610
	C10	Chen et al. (1994) Biochem. 33:8746-8756
	C11	Cohen et al. (1969) Proc. Natl. Acad. Sci. USA 63.458-464
	C12	Cohen J. (1994) Science 264: 1839
	C13	Conrad et al., (1996) Methods. Enzymol. 267: 336-367
	C14	Cormier et al., (2000) PNAS 97. 5762-5767
	C15	Cummins et al., (1995) Nacl. Acids. Res. 23: 2019-2024
	C16	Davis et al. (1996) Methods in Enzymology Vol. 267(18): 302-314
	C17	Dehouck et al., (1996) Biology and Physiology of the Blood Brain Derrier, Couraud and Scherman eds., Chapter 23, pp. 143-146
	C18	Doranz et al., (1999) J. Virol. 73: 10346-10358
	C19	Dougan et al., (2000) Nucl. Med. Biol. 27: 289-297
	020	Ellington & Szostak (1990) Abstracts of papers presented at the 1990 meeting on RNA Processing, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, Pg. 84
	C21	Emini et al., (1992) Nature 355: 728-730

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Express Mail No.: EV461508866US Date of Deposit: May 22, 2006

xara Itials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
1	C22	Evans et al., (2001) Vaccine. 19: 2080-2091
	CE3	Fitzwater et al., (1996) Methods in Enzymology vol. 267:275-301
	C24	Fouts et al., (2002) PNAS. 99: 11842-11847
	C25	Gaschen et al., (2002) Science. 296: 2354-2360
	C26	Outh et al., (1996) Biology and Physiology of the Blood Brain Barrier, Courand and Scherman ed Chapter 25, pp. 153-158
	C27	Graham BS. (2002) Annu Rev Med. 53: 207-221
	C28	Green et al., (1995) Chemistry and Biology 2:683-695
	C29	Jellinek et al. (1994) Biochemistry 33:10450-10456
	C30	Jellinek et al., (1995) Biochemistry 34(36):11363-11372
	C31	Joyce & Inoue (1989) Nucleic Acids Research 17:711-722
	C32	Joyce (1989) Gene 82 83-87
	C33	Kacian et al. (1972) Proc Natl. Acad. Sci. USA 69:3058-3042
	C34	Kadonaga et al. (1986) Proc. Natl. Acad. Sci. USA 83:5889-5893
	C35	Kahn et al., (1994) J Infect Dis. 170: 1288-1291
	C36	Kalams et al., (2000) HIV Vaccines 2000: Prospects and Challenges. In "The Human Immunodeficiency Virus", Princeton University Press, Princeton, N.J. pp 481-509
	C37	Kellogg et al., (1994) BioTechniques 11134-1137
	C38	Kinzler & Vogelstein (1989) Nucleic Acids Research 17:3645-3653
	C39	Kinzler et al. (1990) Mol. Cell. Bjól. 10:634-642
	C40	Kowalski et al., (1987) Science. 237: 1351-1353
	C41	Kramer et al. (1974) J. Mol Biol. 89:719-736
	C42	Kraus et al., (1998) Journal of Immunology 160:5209 5212
	C43	Kwong et al., (1998) Nature. 393: 648-659
	C44	Kwong et al., (2002) Nature. 420: 678-682
	C45	Langlois et al., (1998) J Virol. 72: 6950-6955
	C46	Leonard et al., (1990) J Biol Chem. 265: 10373-10382
	C47	Lestienne et al. (1983) Biochimie. 65:49-52
	C48	Levisokn & Spiegelman (1968) PNAS USA 60:866-872
	C49	Leyisohn & Spiegelman (1969) PNAS USA 63:805-811
_	C50	Jeu et al., (1995) Nat Struct Biol. 2: 1075-1082
	C51	Ma and Ptashne (1987) Cell 51: 113-119
	C52	Maniatis (1982) Molecular Cloning: a Laboratory Manual, Cold Spring Harbor, NY og.118
	9 53	Maniatis et al. (1987) Science 236: 1237-1245
	C54	Martin et al., (2003) Nature Biotechnology. 21: 71-76
	C55	Mascola et al., (1996) J Infect Dis. 173: 340-348
	C56	McGaughey et al., (2003) Biochemistry. 42: 3214-3223
	C57	Miele et al. (1983) J. Mol. Biol. 171:281-295

Express Mail No.: EV461508866US Date of Deposit: May 22, 2006

19 19 19 19	1. 11 15 15 15 15 15 15 15 15 15 15 15 15	OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS
Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
muais	C58	Mills et al. (1967) Proc. Natl. Acad. Sci., USA 58:217-220
	C\$9	Mills et al (1973) Science 180:916-927
	C60	Min et al (1988) Nucleic Acids Res. 16:5075-5088
	C61	Moore et al., (1988) AIDS Research and Human Retroviruses 4(5):369-379
	C62	Moulard et al., (2002) Proc Natl Acad Sci U S A. 99: 6913-6918
	C63	Muesing et al. (1985) Nature 313:450-458
	C64	Nixon et al., (1999) Immunol Lett.;66(1-3):219-228
	C65	Oliphant & Struhl (1987) Methods in Enzymology 155:568-582
	C66	Oliphant & Struhl (1988) Nucleic Acids Research, 16:7673-7687
	C67	Oliphant et al. (1986) Gene 44:177-183
	C68	Oliphant et al. (1989) Mol. Cell. Biol. 9:2944-2949.
	C69	Orgel (1979) Proc. R. Soc. Lon. B205:435-442
	C70	Ou et al. (1988) Science 289:295-297
	C71	Pieken et al., (1991) Science. 253: 314-317
	C72	Poignard et al., (2001) Annu Rex Immunol. 19. 253-274
	C73	Prince et al., (1991) AIDS Res Hum Retroyaruses. 7: 971-973
	C74	Profy et al., (1990) J Immunol. 144: 4641-4647
	C75	Putkonen et al., (1991) Nature. 352: 436-438
	C76	Richman et al., (2003) PNAS. 100. 4144-4149
	C77	Rizzuto et al., (1998) Science. 280: 1949-1953
	C78	Robertson & Joyce (1990) Nature 344:467
	C79	Romaniuk et al. (1987) Blochem. 26(6):1563-1568
	C80	Ruckman et al., (1998) J. Biol. Chem. 273: 20556-2056
	C81	Saffhill et al. (1970) J. Mol. Biol. 51 :531-539
	C82	Sambrook et al. (1989) Molecular Cloning: A Laboratory Manual, Cold Spring Harbor, NY, Section 8.9-8.10
	C83	Sattentau et al., (1991) J Exp Med. 174: 407-415.
	C84	Sattentage et al., (1993) J Virol. 67: 7383-7393
	C85	Singleton et al., Dictionary of Microbiol. & Molec. Biol., Wiley & Sons, New York, NY, 2nd ed. p. 493
	C86	Sood et al., (1977) Nucleic Acids Res 4(8):2757-2765
	C87	Soukup and Breaker (1999) Structure 7(8):783-791
	C88	Sproat et al., (1991) Nucleic Acids Res 19(4): 733-738
	289	Starcich et al., (1986) Cell. 45: 637-648
	C90	Sullivan et al., (1998) J Virol. 72: 6332-6338
	C91	Szostak, Structure and Activity of Ribozymes, Redesigning the Molecules of Life, (SA Benner ed.) Springer-Verlag Berline Heidelberg, pp. 87-113 (1988)
	C92	Tanchou et al. (1994) Aids Research and Human Retroviruses 10:983-993
	C93	Thali et al., (1993) J Virol. 67: 3978-3988

Express Mail No.: EV461508866US Date of Deposit: May 22, 2006

5	Cite	OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS
Exam Initials	No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
	C94	Thiesen & Bach (1990) Nucleic Acids Research 18:3203-3209
	C95	Trkela et al., (1996) Nature. 384: 184-187
	C96	Trkola et al. (1996) J Virol. 70: 1100-1108
	C97	Tucker et al., (1999) J. Chromatography B. 732: 203-212
	C98	Tuerck and Gold (1990) Science 249(4968):505-510
	C99	Tyagi et al., (1996) Nature Biotechnology 14:303-208
	C100	Uhlenbeck et al. (1983) J. Biomolecular Structure and Dynamics 1:539-552
	C101	Watanabe M (2003) Nature Medicine. 9: 376
	C102	Watson et al (1987) Molecular Biology of the Gene. Benjamin/Cummings Publishing Co., Inc. California, pp. 267,295,323,361,394,396,397 and 405
	C103	Wei et al., (2003) Nature. 422: 307-312
	C104	Wu et al., (1996) Nature. 384: 179-183
	C105	Wu et al., (1997) J. Exp. Med. 185: 1681-1691
	C106	Yamamoto and Kumar (2000) Genes to Cells 5:389-396
	e107	Zhang et al., (1999) Biochemistry. 38: 9405-9416
	C108	Zhang et al., (2001) Biochemistry. 40: 1662-1670

^{*} By the waiver of 37 CFR 1.98(a)(2)(i) copies of the U.S. Patents A3-A38 are not submitted.

Examiner Signature	/Louise Humphrey/	(09/12/2006)	Date Considered	
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